

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/682,127 Confirmation No. 1350  
Applicant : Sirinyan et al.  
Filed : October 9, 2003  
Title : DERMALLY APPLICABLE LIQUID FORMULATIONS FOR  
CONTROLLING PARASITIC INSECTS ON ANIMALS  
Group Art Unit : 1615  
Examiner : NEIL S LEVY  
Docket No. : LeA 35172

**VIA EFS**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**DECLARATION OF ROBERT ARTHER UNDER 37 C.F.R. §1.132**

Dr. Robert Arthur declares and states as follows:

1. I am the inventor of the subject matter claimed in US Application No. 09/727,117, entitled "Compositions for Enhanced Acaricidal Activity."
2. I received a Master of Science degree in Wildlife Parasitology from Colorado State University, in 1975. Thereafter, I received a Doctorate in Veterinary Parasitology from the University of Illinois in 1978.
3. From October 1, 1979 to date, I have been employed by Bayer HealthCare LLC, Shawnee, KS, US, in particular in the Animal Health Division. My present position is Manager of the Department of Parasitology and Entomology.
4. The department of research and development for Bayer Animal Health, Monheim, Germany and the department of research and development for

Bayer Animal Health, Shawnee, KS, US collaborate closely on numerous projects.

5. Prior to May 2000, several discussions were conducted between Germany and the US discussing potential formulations of pest control compounds that could be used to treat both fleas and ticks. I was involved in many of those discussions and development work flowing out of them, as was Kirkor Sirinyan, from Bayer Animal Health Monheim. Resulting from these discussions was a concept of mine to use two active ingredients, permethrin and imidacloprid, in such a formulation. This concept of this formulation is disclosed and claimed in my U.S. Application 09/727,117.
6. I did not conceive or invent the use of N-methylpyrrolidone (NMP) to solubilize the combination of permethrin and imidacloprid, and I did not know of its use or particular efficacy for this purpose prior to the disclosure of this information referred to in paragraph 7 below.
7. On September 11, 2000, Dr. Guenther Werner, the project manager for this formulation project in Monheim, Germany, disclosed to my German and US colleagues, in the department of research and development at Bayer that Dr. Kirkor Sirinyan had discovered that NMP would solubilize both imidacloprid and permethrin to provide the desired formulation properties and had been perfecting a particular formulation that included NMP, imidacloprid, and permethrin.
8. The use of NMP as a solvent for imidacloprid and permethrin referred to in paragraph 6 above was included in the specification of my patent application to comply with the requirements of 35 U.S.C. 112. The use and particular value of NMP solvent for formulations of imidacloprid and permethrin was made known to me, but I did not invent that subject matter. Its inclusion in my patent application is attributable to specific

formulation work performed in Monheim by, on my information and belief,  
Kirkor Sirinyan.

9. I do not claim now or in my patent application the particular use of NMP referred to in paragraph 7 above.
10. I expressly disclaim being the inventor of the use of NMP as a solvent for imidacloprid and permethrin and a formulation that includes NMP, imidacloprid, and permethrin.
11. The applicant further declares that all statements made herein are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and that such willful false statements may jeopardize the validity of the application or any patent issuing therefrom.



Dr. Robert Arther



Date